Transfusion contracts for Jehovah's Witnesses receiving organ transplants: ethical necessity or coercive pact?

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Jehovah's Witnesses should be required to sign transfusion contracts in order to be eligible for transplant.

Human donor organs (living and cadaveric) continue to be in short supply, and many potential transplant recipients die while waiting for an allograft to become available.[1] Because the organ supply is so limited and the offering of organs is based on the generosity of patients and families, proper stewardship of these organs is an ethical obligation for transplant teams, as well as organ recipients. Preventable graft loss must be protected against, and factors that foster preventable graft loss—for example, noncompliance must be proactively contemplated when patients are reviewed as potential transplant candidates. Post-transplant treatment refusal is one example of behaviour that can compromise transplant success.

JEHOVAH'S WITNESSES AS TRANSPLANT RECIPIENTS

It is widely known that one of the most significant teachings of the Jehovah's Witness church is abstinence from receiving blood transfusions.[2] Believers derive this tenet from the Bible verse: ''You are to abstain from …blood''.[3] While blood loss is a risk of transplant surgery, some centres do not view patient refusal of blood transfusion as a transplant exclusion criterion. The first published case of transplantation of a Jehovah's Witness appeared in 1986 from the University of California Los Angeles heart transplant team.[4] Since then, numerous other cases (cadaveric and living donor) have been published, including liver,[5] kidney,[6] pancreas,[6] and lung.[7] For experienced centres with superior blood management skills, transplant can indeed be a surgical success; however, optimal blood management before and during surgery are only two thirds of the patient's clinical time clock. In the remaining third, the post-transplant period, the patient has received his/her organ, yet the potential for clinical need of blood transfusion remains.

THE DILEMMA

Whether due to postoperative complication, or future illness or trauma, all transplant recipients have the potential for clinical need of blood transfusion. During transplant surgery blood loss is also a real possibility. In a recent study of 635 patients who received a liver transplant, interoperative blood loss ranged from 5.15 to 1980 mL per kg (mean, 136 mL/kg). Massive blood loss negatively affected survival not only immediately after operation but also over the long term.[8] Refusal of transfusion puts the organ at risk of loss—a loss that is preventable. This said, successful transplant surgery (and organ life span) can be negatively impacted if recipients refuse needed blood transfusion. After surgery, the best intentions of the surgical team are effectively hamstrung when transplant recipients engage in behaviour (passively or actively) that hinders transplant success. To this end, treatment refusal, whether it be declining to take daily antirejection medications, or declining a needed blood transfusion, must be viewed proactively by transplant teams.

In tackling the dilemma of Jehovah's Witnesses as transplant candidates, the concept of rescue transfusion (clinically urgent and essential blood transfusion) has been posed. At the University of Pisa (Italy), transfusion contracts are required for patients receiving kidney and/or pancreas transplants.[6] Logistically, rescue transfusion could apply to operative and postoperative settings. Ethically, rescue transfusion is not a simple solution but rather a very complex concept entwined with philosophical matters such as consent, coercion, and vulnerability.

Fundamentally, all patients needing organ transplants can be viewed as a vulnerable population because their decision making is based on the fact that transplant is life saving therapy. In general, these patients tend to make life choices that foster their candidacy as organ recipients—for example, pre-transplant compliance. Further, they consent to procedures that lead to placement on the transplant waiting list—for example, catheterisation, imaging, and biopsy. For these patients, transplant can be like a carrot on a stick, for they know that transplant is their key to staying alive. This leads to the notion of coercion—patients can be convinced to do many things in order to become eligible for transplant, but after transplant, continued compliance is another matter.[9]

One might argue that any coercion that is done pretransplant is done in the patient's best interest (to increase their chance at transplant and, ultimately, survival), and thus ethically appropriate. An example of this is behaviour contracts restricting alcohol use.[10] Patients with a history of alcoholic liver disease are often required to sign alcohol abstinence contracts (requiring random toxicology screening) as a condition of transplant listing. In the pretransplant setting, the contracts are enforceable as patients are randomly screened for alcohol use and removed from the transplant list (temporarily or permanently) when positive results are confirmed. Also, requiring alcohol abstinence prior to transplant can give the liver a chance to recover, possibly avoiding need for transplant. Thus while coercive, the alcohol abstinence contract can provide a direct health benefit to patients with alcoholic liver disease.

After transplant, however, the utility of the alcohol abstinence contract is weakened as patients have succeeded in their goal, that is, getting an allograft. In the post-transplant setting, the utility of the contract is that it allows the evaluation of post-transplant behaviour to detect alcohol relapse. Confirmed relapse would generate a referral to an alcohol treatment and rehabilitation programme—again, something that would benefit the patient, but cannot be forced upon them. (Even before transplant, alcohol treatment and rehabilitation cannot be forced on a patient; however, the refusal to participate equates to being considered unsuitable for transplant—the exact thing they seek). Utility of the abstinence contract after transplant can also be seen as a way of examining compliance as part of the preparation for a clinically needed retransplant. Not adhering to the contract after transplant can make patients ineligible for future transplants.

If consent to rescue transfusion is used as a transplant eligibility criterion, patients must be informed that this applies to both operative and postoperative transfusion. This is because, if a patient refuses operative rescue transfusion, this puts the survival of the graft at

risk unless there is a back up patient immediately waiting to receive the organ. Further, those refusing operative rescue transfusion are also likely to refuse postoperative (future) rescue transfusions. On the other hand, consenting to only operative transfusion is problematic because it fails to acknowledge the potential risk of clinically needed transfusion after transplant.

As with enforcement of alcohol abstinence contracts, enforcement of rescue transfusion contracts is also problematic. While operative rescue transfusion is easily enforced because the patient cannot voice his/her refusal while under anaesthesia, rescue transfusion at any time after the patient has received their graft and evidences decision making capacity is difficult, if not impossible, to enforce. Behaviour contracts are not legal documents, but rather an attempt to show the patient's steadfast commitment to a therapeutic alliance with the transplant team. Patients may indeed sign behaviour contracts of all types with the outright intent of not honouring them (instead having the outright intent of being considered transplant eligible). In the case of rescue transfusion contracts, patients might sign them and choose not to honour them after transplant for many reasons, including guilt or pressure from outsiders (family, church members).

With regard to religious values, if they are so deeply held that the patient insists on refusing transfusion, is it ethically appropriate to pressure him/her to accept transfusion, rather than respecting the view as a ''special value''[11] and honouring the refusal? While efforts should be made to remind patients of their transfusion contract, whatever their motive, it is generally accepted that patients with decision making capacity are permitted to refuse therapy or withdraw their consent for therapy (change their mind) at any time.[12] Excessively pressuring these patients, as well as transfusing them when they have explicitly withdrawn their consent for transfusion is ethically inappropriate. The latter may even have legal consequences in terms of battery claims.[13]

GUIDANCE

Having explored the complexities of rescue transfusion, the question becomes, should consent for rescue transfusion be a transplant eligibility criterion for all patients? I argue that rescue transfusion contracts are *functionally* similar to behaviour contracts currently in use by most transplant facilities. This is partly because there are many types of behaviour contracts in use by transplant facilities in which the behaviour in question has no link to the root cause of the need for transplant, but the behaviour (or lack of it) can affect patient survival after transplant—for example, diet restrictions, exercise, safe sex).[14] To this end, rescue transfusion contracts are *ethically* no different from these other behaviour contracts in that they serve to optimise transplant outcome. I offer that organ donors and society at large, would, in general, support efforts that foster allograft stewardship, and view such stewardship as an ethical obligation that starts with the transplant team (in terms of organ allocation) and ends with the patient and team working as an allied unit to attain and maintain maximal organ function and life span. Rescue transfusion contracts support these goals.

Patients refusing to consent to rescue transfusion should not be considered transplant candidates unless they are eligible to receive an organ via living donation, and both the donor and the recipient share the same values with regard to transfusion refusal—for example, both donor and recipient are Jehovah's Witnesses. In this setting, the donor and recipient have the same medicoreligious value and overt clinical expectation with regard to graft management—for example, transfusion will be refused, and both are assuming the risk of death due to refusal of transfusion (admittedly with different risk probabilities). Indeed, such donor transplants have occurred.[5 15]

I propose that it is ethically unacceptable to allow a non-Jehovah's Witness to be a live donor for a Jehovah's Witness recipient because although the donor's risk of dying is significantly reduced due to their willingness to accept blood transfusions, there is a philosophical mismatch between the donor and recipient; namely, there is the inherent expectation that recipients should maximise the life span of the graft they receive, including accepting blood transfusions if clinically needed. While a non-Jehovah's Witness could argue that he/she can psychologically accept that the graft recipient will refuse transfusion, I argue that this is ethically problematic. A shared medicoreligous value is necessary in order to justify the risk to the donor in a setting where the recipient will knowingly refuse transfusion—risking graft loss and death. Transplant teams should take a paternalistic approach that is similar to that used in cases of alcoholic liver disease. Specifically, some transplant centres (and insurance companies) do not consider patients with alcoholic liver disease appropriate candidates to receive a living liver donation, even though they may have close friends or relatives who are willing to be their living donor.

A policy for matching Jehovah's Witness donors with Jehovah's Witness recipients is only valid in the case of living donation, unless there is a directed cadaveric donation from a Jehovah's Witness to an identified Jehovah's Witness patient needing transplant. In the US, Jehovah's Witnesses cannot direct that upon their death, their organs be donated only to as yet, unidentified Jehovah's Witness patients (Jehovah's Witnesses as a group).[16] While such donations might allow Jehovah's Witnesses their own playing field with regard to transplant, a foundational construct which is medicoreligious should not provide ethical justification to permit a private playing field for cadaveric transplant for any group. Lastly, the use of extended criteria organs (also known as ''marginal organs'')[17] for patients who refuse blood transfusion is ethically inappropriate as *all* cadaveric organs should be used for patients who affirm, as a condition of being on a waiting list, their commitment to transfusion so as to maximise organ life span—unless there is a cadaveric directed donation between identified Jehovah's Witnesses as described above.

Transfusion contracts do not permit patients to be transfused against their will as these contracts may be revoked by patients at any time. None the less, the contracts are useful in the same manner as behaviour contracts. Just as recovering alcoholics can be required to sign behaviour contracts as a condition of transplant eligibility, Jehovah's Witnesses should be required to sign transfusion contracts in order to be eligible for transplant. Transplantation involves extremely scarce resources (organs) and patients do not have an absolute right or an entitlement to the technology. Transplant teams must exercise forethought in allocating cadaveric livers to patients with a history of alcohol dependence, or any other behaviour that may jeopardise transplant outcome. Similarly, teams must also reflect on how transplanted Jehovah's Witnesses will manage their organ, as their religious values have a direct impact on the practice of medicine.

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REFERENCES

1 US Organ Procurement and Transplantation Network and the Scientific Registry of Transplant Recipients *Annual report: transplant data 1993–2002*. Richmond, VA: Department of Health and Human Services, 2003.
2 **Anon**. *Jehovah's Witnesses and the question of blood*. New York: Watchtower and Tract Society, 1977:1–64.
3 *Holy Bible*, Acts 15, 29 (New English Bible).
4 **Corno AF**, Laks H, Stevenson LW, *et al*. Heart transplantation in a Jehovah's Witness. *J Heart Transplant* 1986;**5**:175–7.
5 **Jabbour N**, Gagandeep S, Mateo R, *et al*. Live donor liver transplantation: staging hepatectomy in a Jehovah's Witness recipient. *J Hepatobiliary Pancreat Surg* 2004;**11**:211–14.
6 **Boggi U**, Vistoli F, Del Chiaro M, *et al*. Kidney and pancreas transplants in Jehovah's Witnesses: ethical and practical implications. *Transplant Proc* 2004;**36**:601–2.
7 **Conte JV**, Orens JB. Lung transplantation in a Jehovah's Witness. *J Heart Lung Transplant* 1999;**18**:796–800.
8 **Yuasa T**, Niwa N, Kimura S, *et al*. Intraoperative blood loss during living donor liver transplantation: an analysis of 635 recipients at a single center. *Transfusion* 2005;**45**:879–84.
9 **Dobbels F**, De Geest S, Van Cleemput J, *et al*. Effect of late medication non-compliance on outcome after heart transplantation: a five year follow up. *J Heart Lung Transplant* 2004;**23**:1245–51.
10 **Maldonado JR**, Keeffe EB. Liver transplantation for alcoholic liver disease: selection and outcome. *Clin Liver Dis* 1997;**1**:305–21.
11 **Orr RD**, Genesen LB. Requests for ''inappropriate'' treatment based on religious beliefs. *J Med Ethics* 1997;**23**:142–7.
12 **Bramstedt KA**. Elective inactivation of total artificial heart technology in non-futile situations: inpatients, outpatients and research participants. *Death Stud* 2004;**28**:423–33.
13 **Malette v Shulman**. *Dominion Law Reports (Canada)* 1990;**67**:3221–39.
14 **Cupples SA**, Steslow B. Use of behavioural contingency contracting with heart transplant candidates. *Prog Transplant* 2001;**11**:137–44.
15 **Jabbour N**, Gagandeep S, Bramstedt KA, *et al*. To do or not to do living donor hepatectomy in Jehovah's Witnesses: single institution experience of the first 13 resections. *Am J Transpl* 2005;**5**:1141–5.
16 **United Network for Organ Sharing**. *Directed donation* [white paper]. June 1996. http://www.unos.org/Resources/bioethics.asp?index=10 (accessed 2 Mar 2005).
17 **Bramstedt KA**. Why an alternate recipient list for heart transplantation is not a form of ageism. *N Z Bioeth J* 2001;**2**:27–31.